

**CERRO COPPER PRODUCTS CO.**

A member of The Marmon Group of companies

**INTERNAL MEMORANDUM**

HQ-10      SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

OTHER ADDRESSEES - FOR INFORMATION

CC: File

1104

153883

TO: Paul Tandler

DATE: 8 March 1982

FROM: John Schuster

SUBJECT: Well Water Analysis

The water from Well #6 was resampled and analyzed for metals with the following results:

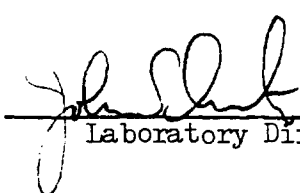
Copper .... None Detected

Lead ..... None Detected

Nickel .... 34 ppm

Zinc ..... 3 ppm

pH ..... 7.4

  
Laboratory Director

JS/rs

C03599

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## INTERNAL MEMORANDUM

HQ-10 SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

### OTHER ADDRESSEES - FOR INFORMATION

R. Brown  
R. Conreaux  
J. Cygan  
J. Ferrell  
W. Lybarger  
L. Rucker  
J. Schuster  
P. Tandler  
File

1104

TO: See Distribution Above

DATE: February 5, 1982

FROM: John L. Sundstrom

SUBJECT: AP SYSTEM SLUDGE GENERATION TEST

An AP system sludge generation test at #3 Anode Furnace to see whether well water or city water is more cost effective as system makeup has been proposed. It is hoped that this test program can be completed during February. John Sundstrom will check on the readiness of the required equipment and notify everyone involved when the tests are to begin and end. The proposed mechanics of test and the persons proposed to be responsible for each phase are as follows:

WELL WATER -

1. The system normally runs on well water so no special setup is required. W. Lybarger should report any interruptions in the operation of the well water supply and the AP system, should any occur during the sampling period, to J. Sundstrom.
2. One liter samples of the blow down from the AP system should be taken every 4 hours and composited for a 24-hour period by J. Sundstrom on day shift, L. Rucker on second shift, and J. Cygan on the third shift. Three daily composite samples should be obtained so some idea of the variation in sludge loading can be obtained. Samples should be taken only while the furnace is producing.
3. J. Sundstrom will measure system flow several times during the sampling period.
4. J. Schuster will have the daily composite samples analysed and will report the results to J. Sundstrom. Analyses should include raw sample pH, suspended solids (grams/liter), sludge produced by treatment with lime and percent Fe of suspended solids and of produced sludge.

CITY WATER -

1. J. Sundstrom and W. Lybarger will choose a time when the well water piping is not likely to freeze up and will switch over to city water for makeup.
2. One heat will be run on city water to flush the well water out of the system.
3. Sampling and analyses will be done the same as for well water.

INTERPRETATION OF RESULTS - John Sundstrom will calculate the cost advantages of using city water as opposed to well water, if any, and report the results.

JLS/bg



C03600

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## INTERNAL MEMORANDUM

OTHER ADDRESSEES - FOR INFORMATION *A.2*

CC: R. E. Conreux  
P. Tandler  
S.A. Silverstein  
File

1104

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

TO: Roy Brown

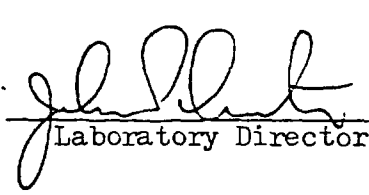
DATE: 3 February 1982

FROM: John Schuster

SUBJECT: Sludge in Effluent

Sludge determinations were made on effluent samples from both Cerro-East and Cerro-West covering the five days from 24 January to 28 January 1982. The results are given below:

	<u>Cerro-East</u>		<u>Cerro-West</u>	
<u>Date</u>	<u>pH</u>	<u>Sludge -lb/K gal</u>	<u>pH</u>	<u>Sludge -lb/K gal</u>
1-24-82	7.5	3.17	7.7	0.100
1-25-82	6.9	1.64	7.9	0.18
1-26-82	<u>4.4</u>	2.05	7.6	0.32
1-27-82	<u>4.0</u>	5.15	8.0	0.46
1-28-82	5.2	13.81	8.0	0.12

  
Laboratory Director

JS/rs

C03601